

What is claimed is:

- 1 1. A method for use in a wireless communications network, comprising:
2 communicating data with plural mobile stations over a wireless link;
3 and
4 sending a broadcast message to the plural mobile stations, the
5 broadcast message containing an indication for indicating to the plural mobile stations
6 that the mobile stations are to change data rates for transmissions over a reverse
7 wireless link.
- 1 2. The method of claim 1, wherein sending the broadcast message
2 comprises sending a grant message on a channel that is monitored by the plural
3 mobile stations.
- 1 3. The method of claim 2, wherein sending the grant message on the
2 channel comprises sending the grant message on a forward grant channel according to
3 code-division multiple access (CDMA) 2000.
- 1 4. The method of claim 2, wherein sending the grant message comprises
2 sending a grant message containing an identifier, the identifier settable to a first value
3 to uniquely identify one of the plural mobile stations, and the identifier settable to a
4 predetermined value to provide a broadcast indication for indicating to the plural
5 mobile stations that the mobile stations are to change data rates for transmissions over
6 the reverse wireless link.
- 1 5. The method of claim 4, wherein the identifier comprises a medium
2 access control (MAC) identifier (MAC ID), the method further comprising:
3 setting the MAC ID of the grant message to the first value to target a
4 first one of the plural mobile stations; and
5 setting the MAC ID of the grant message to the predetermined value to
6 provide the broadcast indication to the plural mobile stations.

- 1 6. The method of claim 5, wherein setting the MAC ID to the
2 predetermined value comprises setting the MAC ID to a binary value 00000000.
- 1 7. The method of claim 2, wherein sending the grant message comprises
2 sending a grant message containing a data rate assignment field and an identifier field,
3 wherein the data rate assignment field contains an assigned data rate for a mobile
4 station identified by the identifier field.
- 1 8. The method of claim 7, wherein the channel is a shared channel
2 monitored by each of the plural mobile stations, the method further comprising setting
3 a value of the identifier to uniquely identify one of the mobile stations such that the
4 one mobile station is able to receive an assigned data rate in the data rate assignment
5 field.
- 1 9. The method of claim 8, further comprising setting the identifier field to
2 a predetermined value to provide a broadcast indication for indicating to the plural
3 mobile stations that the mobile stations are to change data rates for transmissions over
4 the reverse wireless link.
- 1 10. The method of claim 1, wherein sending the broadcast message to the
2 plural mobile stations comprises sending the broadcast message to cause the plural
3 mobile stations to set respective data rates to a value less than or equal to an
4 autonomous data rate of the corresponding mobile station.
- 1 11. The method of claim 10, further comprising a mobile station
2 transmitting data on a reverse wireless link in autonomous mode in response to
3 receiving the broadcast message, wherein transmitting in autonomous mode
4 comprises transmitting the data at a rate that is less than or equal to the autonomous
5 data rate.

1 12. The method of claim 1, wherein sending the broadcast message to the
2 plural mobile stations comprises sending a broadcast message containing an
3 indication for indicating to the plural mobile stations that the mobile stations are to
4 change data rates for transmissions of packet data over respective reverse packet data
5 channels.

1 13. An article comprising at least one storage medium containing
2 instructions that when executed cause a system in a wireless communications network
3 to:
4 communicate data with plural mobile stations over a wireless link; and
5 send a broadcast message to the plural mobile stations, the broadcast
6 message containing a broadcast indication to the plural mobile stations to cause the
7 plural mobile stations to change data rates for transmissions over a reverse wireless
8 link.

1 14. The article of claim 13, wherein sending the broadcast message
2 comprises sending a layer 2 message.

1 15. The article of claim 14, wherein sending the broadcast message
2 comprises sending a grant message on a forward grant channel (F-GCH) in a code-
3 division multiple access (CDMA) 2000 wireless communications network.

1 16. The article of claim 13, wherein sending the broadcast message
2 comprises sending a grant message containing an identifier, the identifier settable to a
3 first value to uniquely identify one of the plural mobile stations, and the identifier
4 settable to a predetermined value to provide the broadcast indication to the plural
5 mobile stations.

1 17. The article of claim 13, wherein sending the broadcast message
2 containing the broadcast indication is for indicating to the plural mobile stations that
3 the mobile stations are to change data rates for transmissions of packet data over
4 respective reverse channels.

1 18. The article of claim 13, wherein sending the broadcast message
2 containing the broadcast indication is for assigning a data rate to each of the plural
3 mobile stations, the data rate relating to transmissions of packet data over respective
4 reverse channels.

1 19. The article of claim 13, wherein sending the broadcast message
2 containing the broadcast indication is for incrementing or decrementing data rates of
3 the plural mobile stations for transmissions of packet data over respective reverse
4 channels.

1 20. A mobile station comprising:
2 an interface to receive messages from a base station, the messages
3 comprising a broadcast message targeted to plural mobile stations; and
4 a controller to change a data rate of transmission over a reverse
5 wireless link in response to the broadcast message.

1 21. The mobile station of claim 20, wherein the broadcast message
2 indicates that the mobile station is to transmit at a data rate that is less than or equal to
3 an autonomous data rate,
4 wherein the controller is adapted to transmit autonomously over the
5 reverse wireless link without scheduling from the base station, the controller to
6 transmit at a data rate that is less than or equal to the autonomous data rate.

1 22. The mobile station of claim 21, wherein the interface is adapted to
2 receive another message from the base station that sets the autonomous data rate.

1 23. The mobile station of claim 20, wherein the controller is adapted to
2 change the data rate of transmission over a reverse packet data channel.

1 24. The mobile station of claim 23, wherein the reverse packet data
2 channel is a code-division multiple access (CDMA) 2000 reverse packet data channel
3 (R-PDCH).

- 1 25. The mobile station of claim 20, wherein the interface is adapted to
- 2 receive the broadcast message on a forward grant channel, the forward grant channel
- 3 being a shared channel for monitoring by plural mobile stations.